

# Epi Monthly Report

Office of Epidemiology and Disease Control



VOLUME 4. ISSUE 2

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Miami-Dade County  
**HEALTH DEPARTMENT**

## Training Announcement: Recognition and Management of Normal, Normal Variant, and Adverse Reactions after Smallpox Vaccination

Presented by Miami-Dade County Health Department



This training is designed for physicians, physician assistants, ARNPs, and nurses. The recognition and

management of normal, normal variant and adverse reactions after smallpox vaccination will be reviewed. Clinicians will also be provided with information about consultative and other resources available for the management of adverse events to smallpox vaccination.

### Wednesday, March 5, 2003

#### **Baptist Hospital of Miami**

8900 N. Kendall Dr.  
Miami, Fla. 33176  
Auditorium, 3<sup>rd</sup> Floor, South Building  
6:30 p.m. – 8:30 p.m.

### Friday, March 7, 2003

#### **Corporate Park Center**

7755 N.W. 48 St.  
Miami, Fla. 33166  
2:15 p.m. – 4:15 p.m.

Please RSVP to Maggie Fernandez (305) 324-2413

### **Directions to Baptist:**

#### **From the North:**

Take U.S. 1 or State Road 826 (Palmetto Expressway) south to

North Kendall Drive. From U. S. 1, turn right and head west to Baptist Hospital, which is on the left (south side). From SR 826, take the North Kendall Drive west exit and head west to Baptist Hospital.

**Turnpike:** Take the Turnpike south to North Kendall Drive. (S. W. 88 Street). Head east on North Kendall Drive to Baptist hospital, which is on the right (south side).

**From the South:** Take U.S.1 to the Florida Turnpike north. Then take State Road 874 north. At the North Kendall Drive exit, turn right (east) onto Kendall Drive. Go east on Kendall Drive to Baptist Hospital, which is on the right (south side).

**From Miami International Airport:** Take State Road 836 (Dolphin Expressway) west to State Road 826 (Palmetto Expressway). Take State Road 826 south to the Kendall Drive exit. Turn right (west) onto Kendall Drive. Head west to Baptist Hospital, which will be on the left (south side).



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### Directions to Corporate Park:

Take State Road 826 Palmetto, exit at 36<sup>th</sup> Street west. Continue west, in the right lane, until 79<sup>th</sup> Avenue, make a right. Continue North on 79<sup>th</sup> Avenue until 48 Street (traffic light) and make a right into Corporate Park. At security entrance, display your identification, and say you are attending training by the health department. After the security gate, make first left and continue to the end of the road, make a right, and look for building 7755 (Miami-Dade County Health Department).

**Turnpike:** Exit 41<sup>st</sup> Street continue east to 79 Avenue, turn left (north) to 48 Street (traffic light), make a right into Corporate Park.



### Operation Vaccinate Florida: Miami-Dade County Update



On February 24th and 25th we began vaccination of the hospital-based smallpox response teams by vaccinating the hospital staff who will be monitoring their coworkers vaccination sites and assisting with wound care. We will begin full-scale vaccination on March 10<sup>th</sup> and continue until April 3<sup>rd</sup>. We would like to thank all our partners in this endeavor.

New materials are available on the Centers for Disease Control and Prevention web site ([www.cdc.gov](http://www.cdc.gov)). These include Smallpox Vaccination and Adverse Reactions: Guidance for Clinicians (<http://www.cdc.gov/mmwr/PDF/rr/rr5204.pdf>) and Recommendations for Using Smallpox Vaccine in a Pre-Event Vaccination Program: Supplemental Recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Healthcare Infection Control Practices Advisory Committee

(HICPAC) (<http://www.cdc.gov/mmwr/pdf/wk/MMWRDispatch2-26-03.pdf>).

### Smallpox Vaccine Adverse Events Among Civilians --- United States, February 18-- 24, 2003

[The following article was selected from CDC MMWR **February 28, 2003 / 52(08);156-157**. The full article can be downloaded from [www.cdc.gov/mmwr/preview/mmwrhtml/mm5208a4.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5208a4.htm)]

During the civilian smallpox vaccination program, CDC and state health departments are conducting surveillance for vaccine-associated adverse events. In the first stage of the program, active surveillance is being conducted for potentially life-threatening, moderate-to-severe, and other serious adverse events and for vaccinia transmission to contacts of vaccinees (1) (Table). Nonserious events are reported through passive surveillance and are expected to be underreported. This report summarizes smallpox vaccine adverse events reported among civilians vaccinated as of February 21, 2003, and received by CDC from the Vaccine Adverse Event Reporting System (VAERS) as of February 24.

Potentially life-threatening and moderate-to-serious events are classified on the basis of evidence in support of the reported diagnoses. For probable cases, other causes are excluded, and supportive information is available. Events are classified as suspected if they have clinical features compatible with the diagnosis but either further investigation is required or additional investigation of the case did not provide supporting evidence for the diagnosis and did not identify an alternative diagnosis. CDC and state health departments also receive reports of other events that are associated temporally with smallpox vaccination. Reported adverse events are not necessarily associated with vaccination, and some or all of these events might be coincidental.

During January 24--February 21, smallpox vaccine was administered to 7,354 civilian health-care and public health workers in 40 jurisdictions. No



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**TABLE. Number of cases\* of adverse events after smallpox vaccination among civilians, by type — United States, February 18–24, 2003**

| Adverse events                                       | No. new cases        |          | Total no. cases        |          |
|--|----------------------|----------|------------------------|----------|
|  | Suspected            | Probable | Suspected              | Probable |
| <b>Potentially life-threatening events</b>           |                      |          |                        |          |
| Eczema vaccinatum                                    | —†                   | —        | —                      | —        |
| Erythema multiforme major (Stevens-Johnson syndrome) | —                    | —        | —                      | —        |
| Fetal vaccinia                                       | —                    | —        | —                      | —        |
| Post-vaccinial encephalitis or encephalomyelitis     | —                    | —        | —                      | —        |
| Progressive vaccinia                                 | —                    | —        | —                      | —        |
| <b>Moderate-to-severe events</b>                     |                      |          |                        |          |
| Generalized vaccinia                                 | 1                    | —        | 1                      | —        |
| Inadvertent inoculation, non-ocular                  | —                    | —        | —                      | —        |
| Ocular vaccinia                                      | —                    | —        | —                      | —        |
| Pyogenic infection of vaccination site               | —                    | —        | —                      | —        |
| <b>Other events of concern</b>                       |                      |          |                        |          |
|  | <b>No. new cases</b> |          | <b>Total no. cases</b> |          |
| Other serious adverse events§                        | 1                    | —        | 1                      | —        |
| Other nonserious adverse events¶                     | 16                   | —        | 23                     | —        |
| Vaccinia immune globulin release                     | —                    | —        | —                      | —        |
| Vaccinia transmission to contacts                    | —                    | —        | —                      | —        |

\* Under investigation or completed as of February 24, 2003; numbers and classifications of adverse events will be updated regularly in *MMWR* as more information becomes available.

† No cases reported.

§ Events that result in hospitalization, permanent disability, life-threatening illness, or death; these events are associated temporally with smallpox vaccination but have not been documented to be associated causally with vaccination.

¶ Include expected self-limited responses to smallpox vaccination (e.g., fatigue, headache, pruritis, local reaction at vaccination site, regional lymphadenopathy, lymphangitis, fever, myalgia and chills, and nausea); additional events are associated temporally with smallpox vaccination but have not been documented to be associated causally with vaccination.

potentially life threatening adverse events were reported as of February 24.

One moderate-to-severe adverse event was reported, a suspected case of generalized vaccinia in a woman aged 39 years. Nine days after receiving smallpox vaccine, the patient reported increased pain at the vaccination site, malaise, and headache. The following day, she developed a pruritic, papular rash on her chest and back that progressed to scattered pustules by day 12 following vaccination. She was treated as an outpatient with antihistamines, and the rash was resolving by day 15. Specimens from the pustular lesions were collected and sent for virologic testing; results are pending.

One other serious adverse event was reported, angina in a man aged 60 years with a history of hypertension, hyperlipidemia, and exertional chest pain and a family history of coronary artery disease. Angina is not known to be associated causally with smallpox vaccination. The patient had onset of chest pain while playing tennis four days after smallpox vaccination and reported to an emergency department. The patient was diagnosed with right coronary artery occlusion, and an angioplasty was per-

formed. He was discharged after being hospitalized for two days.

Among 23 vaccines with reported other nonserious adverse events during January 24–February 24, the most common signs and symptoms were fever (n = six), pruritus (n = five), rash (n = four), vasodilation (n = four), asthenia (n = three), headache/migraine (n = three), malaise (n = three), paresthesia (n = three), and redness at injection site (n = three). Some vaccinees reported multiple signs and symptoms. Surveillance for adverse events during the civilian smallpox vaccination program is ongoing; regular surveillance reports will be published in *MMWR*.

## Reference

CDC. Smallpox Vaccine Adverse Events Monitoring and Response System for the first stage of the smallpox vaccination program. *MMWR* 2002;52:88–9.



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## Norovirus in Miami-Dade County

Juan A. Suarez, Debbie Summers and Marie K. Etienne

### Background

Noroviruses also known as Norwalk-like viruses or NLV's are members of the family *Caliciviridae*. It has been estimated that approximately 23 million cases of acute gastroenteritis each year are due to norovirus infection, and it is now thought that at least 50% of all foodborne outbreaks of gastroenteritis can be attributed to noroviruses in the United States. Norovirus infection is typically a self-limiting condition with a short duration in humans, usually 12 to 60 hours. Symptoms include nausea, vomiting, watery diarrhea, and sometimes people additionally have a low-grade fever, chills, headache, muscle aches, and a general sense of tiredness. The incubation period is 12 to 48 hours. Noroviruses are transmitted primarily through the fecal-oral route, either by consumption of fecally contaminated food or water or by direct person-to-person spread or vomitus aerosols. Environmental and fomite contamination may also act as a source of infection. No evidence suggests that infection occurs through the respiratory system.

The infectious dose may be as low as 10 viral particles. The virus survives in the environment making it difficult to control. Children and the elderly are at increased risk for dehydration. A vaccine is not available at this time. The treatment is rehydration as there are no effective or specific antiviral treatment to fight this infection.

In the past few months there have been a lot of media attention focused on this viral infection due to an increase in outbreaks on cruise ships. The outbreaks have also increased on land nationwide. In Florida, county health departments report increased numbers of norovirus outbreaks. In early February of this year, 18 counties were investigating outbreaks of norovirus. In Miami-Dade County, the Miami-Dade County Health Department, Office of Epidemiology and Disease Control (OEDC) has received an increase of phone calls from concerned citizens and business asking for information on the virus. Outbreaks of person-to-person transmission have been reported in Miami-Dade in the last four years. No-

rovirus infection is not a reportable disease in Florida, but any type of outbreak is actively investigated by OEDC.

### Foodborne Outbreaks of Norovirus Etiology

In Miami-Dade, data on foodborne outbreaks have been collected for many years at the OEDC. The Bureau of Environmental Epidemiology maintains a program for enhanced surveillance and investigation of foodborne illness and has set up a statewide database to monitor and analyze the information. This information is routinely reported to the CDC at the federal level.

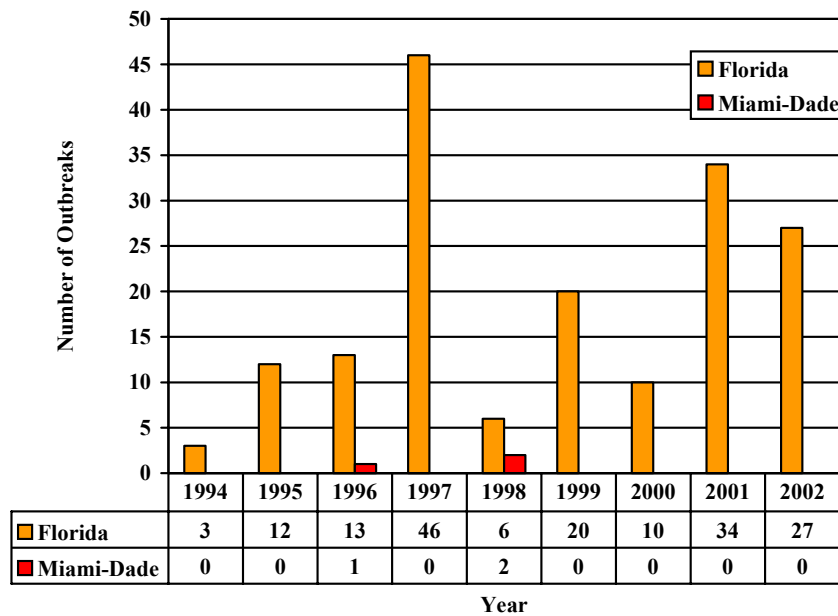
Most foodborne outbreaks of norovirus illness are likely to arise though direct contamination of food by a food handler immediately before its consumption. Outbreaks have frequently been associated with consumption of cold foods, including various salads, sandwiches, and bakery products. Liquid items (e.g., salad dressing or cake icing) that allow virus to mix evenly are often implicated as a cause of outbreaks. Food can also be contaminated at its source, and oysters from contaminated waters have been associated with widespread outbreaks of gastroenteritis.

During the period of 1994 to 2002, there were 3 reported outbreaks of norovirus that could be traced to ingestion of food or water in Miami-Dade County.

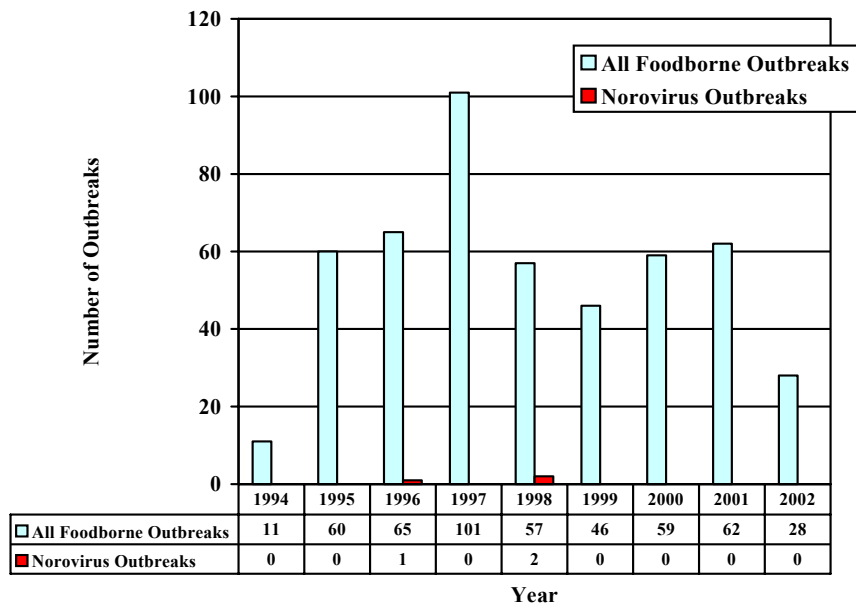
In 1996 a norovirus outbreak in an elementary school in which water was the suspected vehicle resulted in illness in over 510 children. A 1998 norovirus outbreak in a local university where 40 students were ill was traced to hot dogs served at the school's cafeteria. Fresh sliced fruit was suspected to have started a norovirus outbreak that made 270 hotel guests ill in 1998. In most foodborne norovirus outbreaks the transmission begins from a food item being contaminated by an ill handler. Once the infected persons show symptoms, and such as vomiting, secondary cases resulting from person-to-person spread. Figure 1 shows the reported



**Figure 1. Reported Outbreaks of Food or Waterborne Norovirus in Florida and Miami-Dade County, 1994-2002**



**Figure 2. Reported All Foodborne Outbreaks and Norovirus Outbreaks in Miami-Dade County, 1994-2002**





foodborne outbreaks due to norovirus in Miami-Dade County and Florida. Figure 2 compares the data with all foodborne outbreaks in Miami-Dade County.

### **Person-to-Person Norovirus Outbreaks**

Norovirus is very contagious and can spread rapidly throughout childcare and nursing homes and other assisted living facilities (ALF). Figure 3 shows all nonfoodborne outbreaks and norovirus outbreaks in Miami-Dade County child care facilities between 1999 and 2002.

### ***Child Day Care Facilities***

In Miami-Dade the OEDC has been collecting data on outbreaks among infants in child care facilities since 1999. The transmission in these facilities has been person-to-person including during changing diapers and aerosols produced from vomiting. A steadily increasing number of outbreaks could be due to better surveillance and reporting. The etiologies of these outbreaks includes the enteric pathogens of *Shigella*, *Giardia*, *Salmonella*, *Campylobacter* and *Cryptosporidium*. The most common being *Shigella*. All these pathogens are reportable as individual cases.

In a number of these outbreaks the pathogen has been determined from testing to be norovirus. Others have been reported as gastroenteritis when a pathogen was not found. The distribution of these outbreaks in the year has been from February to September. The number of cases per outbreak ranged from 18 to 63 or about 20% of the total persons of each child day care. There have been one to two norovirus outbreaks each year.

### ***Long Term Care Facilities***

Norovirus outbreak data has been collected from ALF and nursing home facilities since 2001. In 2001 there were four outbreaks of norovirus in long term care facilities, three of them confirmed and one suspected. A total of 179 residents were involved in those outbreaks. In 2002, four nursing homes and one hospital psychiatric floor were reported to the OEDC with one suspected and four confirmed outbreaks of norovirus. Last year 165 residents were

reported in those outbreaks. So far, in 2003 one outbreak has been confirmed in a nursing home. In the case of nursing homes the care by assistants adds to the transmission if strict infection control are not followed.

### **Prevention**

Following preventive steps decrease the transmission of noroviruses:

- ◆ Frequently wash your hands, especially after using the toilet visits and changing diapers and before eating or preparing food.
- ◆ Carefully wash fruits and vegetables, and steam oysters before eating them.
- ◆ Thoroughly clean and disinfect contaminated surfaces immediately after an episode of illness by using a bleach-based household cleaner.
- ◆ Immediately remove and wash clothing or linens that may be contaminated with virus after an episode of illness (use hot water and soap).
- ◆ Flush or discard any vomitus and/or stool in the toilet and make sure that the surrounding area is kept clean.

In the prevention of foodborne outbreaks caused by this very contagious virus, it is essential to exclude food handlers that may be ill for up to three days after the symptoms have subsided as they may continue to shed the virus in their feces.

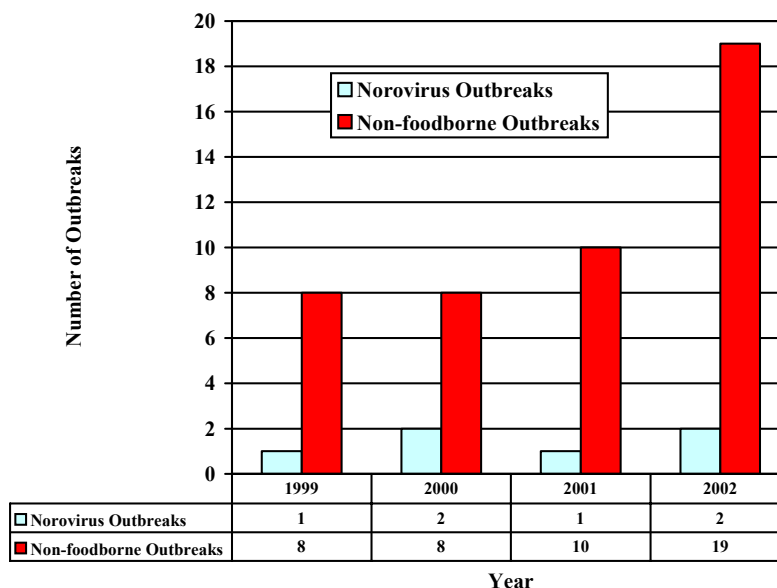
### **References**

Overview of Foodborne Norovirus Reported in Florida, 1994-2002 Data from the Bureau of Environmental Epidemiology, Florida Department of Health

FDA BadBug Book Fact Sheet: <http://www.cfsan.fda.gov/~mow/chap34.html>



**Figure 3. All Non-foodborne Outbreaks and Norovirus Outbreaks in Miami-Dade County Child Care Facilities, 1999-2002**



Food-related Illness and Death in the United States: <http://www.cdc.gov/ncidod/eid/vol5no5/mead.htm>

CDC Noroviruses Q & A: <http://www.cdc.gov/ncidod/dvrd/revb/gastro/noro-qa.pdf>

CDC Noroviruses and Food Handlers: <http://www.cdc.gov/ncidod/dvrd/revb/gastro/noro-foodhandlers.pdf>

CDC Technical Fact Sheet on Noroviruses: <http://www.cdc.gov/ncidod/dvrd/revb/gastro/noro-factsheet.pdf>

“Norwalk-Like Viruses” – Public Health Consequences and Outbreak Management: Morbidity and Mortality Weekly Report, Recommendations and Reports (50) RR-9, June 1, 2001, <http://www.cdc.gov/ncidod/dvrd/revb/gastro/rr5009.pdf>

Norovirus Activity – United States, 2002, MMWR (52)3:41-45, January 24, 2003, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5203a1.htm>

Outbreaks of Gastroenteritis Associated with No

roviruses on Cruise Ships - United States, 2002, MMWR (51)49:1112-1115, December 13, 2002, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5149a2.htm>



**To report diseases or for information:**

Office of Epidemiology and Disease Control  
 Childhood Lead Poisoning Prevention Program (305) 623-3565  
 Hepatitis (305) 324-2490  
 Other diseases and outbreaks (305) 324-2413

HIV/AIDS Program (305) 324-2459  
 STD Program (305) 325-3242  
 Tuberculosis Program (305) 324-2470  
 Special Immunization Program (305) 376-1976  
**Nights, weekends, and holidays (305) 377-6751**



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# Monthly Report

## Selected Reportable Diseases/Conditions in Miami-Dade County, January 2003

| Diseases/Conditions                              | 2003<br>this Month | 2003<br>Year to Date | 2002<br>Year to Date | 2001<br>Year to Date | 2000<br>Year to Date | 1999<br>Year to Date |
|--|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| AIDS <sup>Provisional</sup>                      | 113                | 113                  | 97                   | 105                  | 131                  | 94                   |
| Campylobacteriosis                               | 7                  | 7                    | 2                    | 5                    | N/A                  | 0                    |
| Chancroid  | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| <i>Chlamydia trachomatis</i>                     | 126                | 126                  | 336                  | 189                  | 65                   | 335                  |
| Ciguatera Poisoning                              | 0                  | 0                    | 0                    | 0                    | N/A                  | 0                    |
| Cryptosporidiosis                                | 2                  | 2                    | 0                    | 3                    | N/A                  | 0                    |
| Cyclosporiasis                                   | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Diphtheria                                       | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| <i>E. coli</i> , O157:H7                         | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| <i>E. coli</i> , Other                           | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Encephalitis                                     | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Giardiasis, Acute                                | 1                  | 1                    | 2                    | 2                    | N/A                  | 3                    |
| Gonorrhea  | 84                 | 84                   | 170                  | 104                  | 46                   | 262                  |
| Granuloma Inguinale                              | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| <i>Haemophilus influenzae</i> B (invasive)       | 0                  | 0                    | 0                    | 1                    | 0                    | 0                    |
| Hepatitis A                                      | 0                  | 0                    | 0                    | 8                    | N/A                  | 2                    |
| Hepatitis B                                      | 0                  | 0                    | 1                    | 1                    | N/A                  | 0                    |
| HIV <sup>Provisional</sup>                       | 130                | 130                  | 152                  | 143                  | 132                  | 97                   |
| Lead Poisoning                                   | 3                  | 3                    | 9                    | 18                   | 3                    | 19                   |
| Legionnaire's Disease                            | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Leptospirosis                                    | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Lyme disease                                     | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Lymphogranuloma Venereum                         | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Malaria  | 0                  | 0                    | 1                    | 0                    | N/A                  | 2                    |
| Measles  | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Meningitis (except aseptic)                      | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Meningococcal Disease                            | 1                  | 1                    | 2                    | 1                    | 1                    | 0                    |
| Mumps  | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Pertussis  | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Polio  | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Rabies, Animal                                   | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Rubella  | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Salmonellosis                                    | 12                 | 12                   | 7                    | 10                   | N/A                  | 2                    |
| Shigellosis                                      | 13                 | 13                   | 7                    | 4                    | N/A                  | 0                    |
| <i>Streptococcus pneumoniae</i> , Drug Resistant | 4                  | 4                    | 8                    | 0                    | N/A                  | 2                    |
| Syphilis, Infectious                             | 20                 | 20                   | 15                   | 10                   | 10                   | 10                   |
| Syphilis, Other                                  | 64                 | 64                   | 74                   | 29                   | 62                   | 104                  |
| Tetanus  | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Toxoplasmosis                                    | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| Tuberculosis <sup>Provisional</sup>              | N/A                | N/A                  | 13                   | 11                   | 15                   | 0                    |
| Typhoid Fever                                    | 0                  | 0                    | 0                    | 0                    | N/A                  | 0                    |
| <i>Vibrio cholera</i>                            | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |
| <i>Vibrio</i> , Other                            | 0                  | 0                    | 0                    | 0                    | 0                    | 0                    |

\* Data on AIDS are provisional at the county level and are subject to edit checks by state and federal agencies.

\*\* Data on tuberculosis are provisional at the county level.

